



Water-Data Report 2008

01379773 GREEN POND BROOK AT PICATINNY ARSENAL, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 40°57'36", long 74°32'23" referenced to North American Datum of 1983, Rockaway Township, Morris County, NJ, Hydrologic Unit 02030103, on left bank at Picatinny Arsenal, 50 ft downstream of bridge on Craine Road, 500 ft upstream from Picatinny Lake, and 0.55 mi downstream from Burnt Meadow Brook.

DRAINAGE AREA.--7.65 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 712.54 ft above NGVD of 1929 (U.S. Army, Picatinny Arsenal, benchmark).

REMARKS.--Records fair, except for daily discharges from Oct. 1-3 and 6-9, which are poor due to beaver activity. Some regulation by Lake Denmark and Green Pond. Satellite gage-height telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 75 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 24	0000	85	2.44
Feb 13	1500	98	2.52
Feb 18	1345	81	2.41
Mar 8	1615	*147	*2.79

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e1.5	14	17	51	16	24	14	14	7.3	1.9	1.5	1.4
2	e1.4	12	15	47	23	22	16	15	5.8	1.9	1.7	1.3
3	e1.4	11	17	40	23	20	14	15	4.7	1.9	1.6	1.3
4	1.7	8.4	15	34	25	23	17	14	5.8	2.2	1.5	1.2
5	1.3	7.4	14	29	26	57	17	13	5.4	2.3	1.5	1.2
6	e1.2	7.7	12	27	27	66	16	12	4.6	2.3	1.9	8.5
7	e1.1	6.9	11	26	28	61	14	9.7	4.2	2.1	1.6	12
8	e1.1	6.0	10	25	26	97	13	7.9	4.5	2.1	1.6	6.3
9	e1.4	5.6	9.5	24	24	109	12	12	4.9	2.0	1.6	6.4
10	3.5	6.6	12	21	23	90	11	15	4.2	1.9	1.5	5.3
11	2.9	5.7	11	21	21	73	11	14	4.2	1.8	1.9	3.7
12	3.7	4.8	12	20	19	59	17	15	3.4	1.8	2.3	3.9
13	2.5	5.3	13	22	71	49	15	12	2.8	1.7	2.0	4.2
14	2.1	5.4	14	26	80	42	17	10	2.5	2.0	1.8	3.6
15	1.9	7.9	14	25	77	39	20	12	2.7	1.9	2.3	3.1
16	1.8	8.3	16	22	64	36	18	17	2.7	1.7	2.9	2.8
17	1.6	7.4	16	20	54	31	17	20	3.0	1.6	2.3	2.6
18	1.6	7.7	14	23	73	28	15	21	2.6	1.6	2.0	2.3
19	2.1	8.7	13	21	77	33	13	22	2.4	1.4	1.8	2.1
20	3.6	8.9	17	19	66	41	11	27	2.3	1.3	1.9	2.1
21	2.7	11	19	16	54	39	9.7	27	2.5	1.3	1.8	2.1
22	2.4	12	18	15	48	35	8.1	25	2.3	1.3	1.8	2.0
23	2.1	10	35	14	43	30	7.0	22	2.3	1.6	1.7	1.9
24	2.2	8.1	69	12	37	26	6.1	20	2.3	3.1	1.7	1.8
25	2.1	7.4	64	11	32	22	5.0	17	2.3	2.5	1.7	1.7
26	2.2	12	58	10	30	20	4.8	15	2.3	2.0	1.6	4.7
27	21	19	54	9.5	30	18	4.4	15	2.2	1.8	1.6	4.3
28	20	20	47	8.9	27	17	6.9	13	2.1	1.7	1.6	8.3
29	20	20	55	9.9	24	15	10	10	2.2	1.6	1.6	16
30	18	19	52	13	---	13	10	8.3	1.9	1.6	1.6	20
31	16	---	54	12	---	13	---	7.2	---	1.6	1.6	---
Total	148.1	294.2	797.5	674.3	1,168	1,248	370.0	477.1	102.4	57.5	55.5	138.1
Mean	4.78	9.81	25.7	21.8	40.3	40.3	12.3	15.4	3.41	1.85	1.79	4.60
Max	21	20	69	51	80	109	20	27	7.3	3.1	2.9	20
Min	1.1	4.8	9.5	8.9	16	13	4.4	7.2	1.9	1.3	1.5	1.2
Cfsm	0.62	1.28	3.36	2.84	5.26	5.26	1.61	2.01	0.45	0.24	0.23	0.60
In.	0.72	1.43	3.88	3.28	5.68	6.07	1.80	2.32	0.50	0.28	0.27	0.67

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	7.95	12.1	18.5	16.8	16.4	23.0	24.3	16.1	11.6	6.54	6.10	5.67
Max	26.1	36.6	49.5	45.5	40.3	49.5	64.1	50.6	56.4	32.6	31.9	24.7
(WY)	(1990)	(2007)	(1997)	(1996)	(2008)	(1983)	(1983)	(1989)	(2003)	(1984)	(2000)	(1987)
Min	0.68	0.53	0.55	1.31	1.87	3.66	3.84	4.49	2.39	1.71	1.49	1.36
(WY)	(1998)	(1999)	(1999)	(2002)	(2002)	(2002)	(1985)	(1999)	(2007)	(1999)	(1999)	(1998)

01379773 GREEN POND BROOK AT PICATINNY ARSENAL, NJ—Continued**SUMMARY STATISTICS**

	Calendar Year 2007	Water Year 2008		Water Years 1983 - 2008	
Annual total	4,732.9		5,530.7		
Annual mean	13.0		15.1		13.7
Highest annual mean				21.4	1984
Lowest annual mean				5.10	2002
Highest daily mean	180	Apr 16	109	Mar 9	248 Apr 5, 1984
Lowest daily mean	a1.1	Oct 7,8	a1.1	Oct 7,8	0.22 Nov 23, 1998
Annual seven-day minimum	1.3	Oct 2	1.3	Oct 2	0.25 Nov 19, 1998
Maximum peak flow			147	Mar 8	333 Apr 5, 1984
Maximum peak stage			2.79	Mar 8	3.51 Apr 5, 1984
Instantaneous low flow					0.19 Nov 23, 1998
Annual runoff (cfsm)	1.70		1.98		1.80
Annual runoff (inches)	23.01		26.89		24.40
10 percent exceeds	28		36		31
50 percent exceeds	6.9		10		8.5
90 percent exceeds	2.1		1.6		2.2

^a Estimated.

